

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P967924

Luminaire Tested: **NAV-SB5A-835-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967924
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-835-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21557.8 lumens
Efficiency: N/A
Efficacy: 152.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

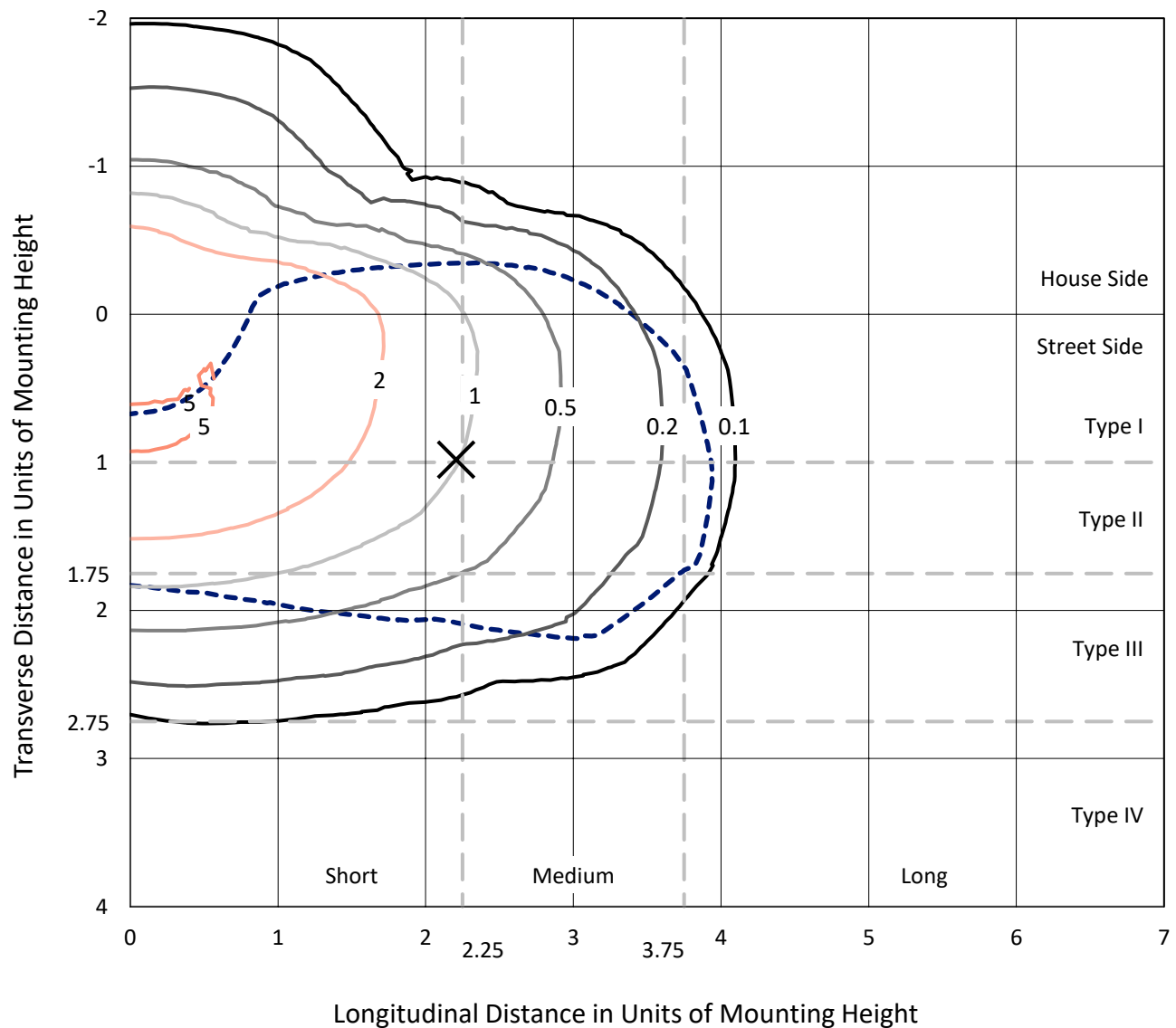


REPORT NUMBER: P967924

CATALOG NUMBER: NAV-SB5A-835-U-T3

Iso-Footcandle Lines of Horizontal Illumination

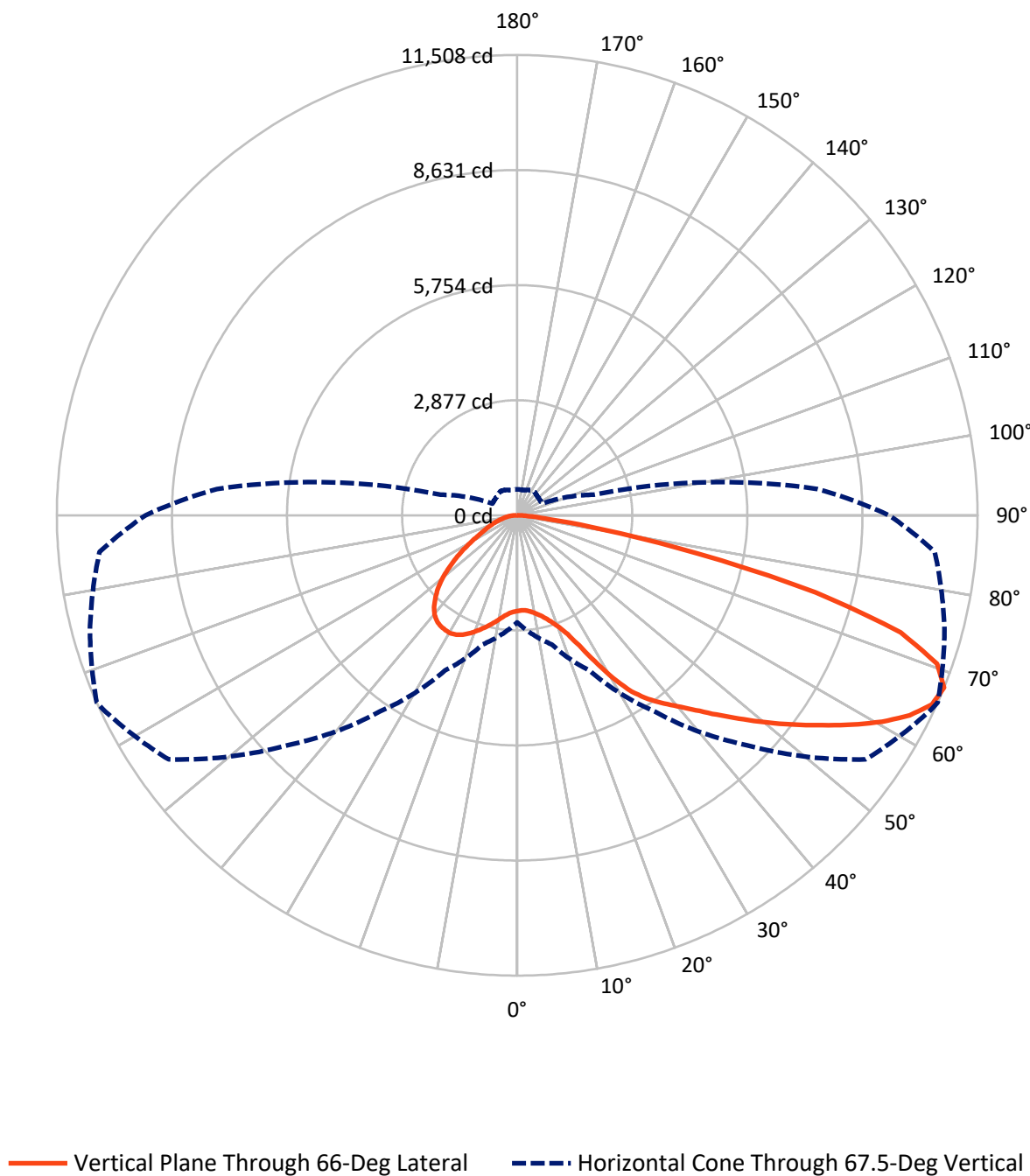
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
Type III - Short - N/A

REPORT NUMBER: P967924
CATALOG NUMBER: NAV-SB5A-835-U-T3

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5360.3	0.0	5360.3
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	16197.5	0.0	16197.5
	% Fixture	75.1	0.0	75.1
Total	Lumens	21557.8	0.0	21557.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.1	1.1
10°-20°	783.2	3.6
20°-30°	1509.6	7.0
30°-40°	2646.9	12.3
40°-50°	3935.1	18.3
50°-60°	4988.1	23.1
60°-70°	4880.8	22.6
70°-80°	2328.2	10.8
80°-90°	248.8	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	21557.8	100.0
0°-180°	21557.8	100.0

Coefficient of Utilization



REPORT NUMBER: P967924

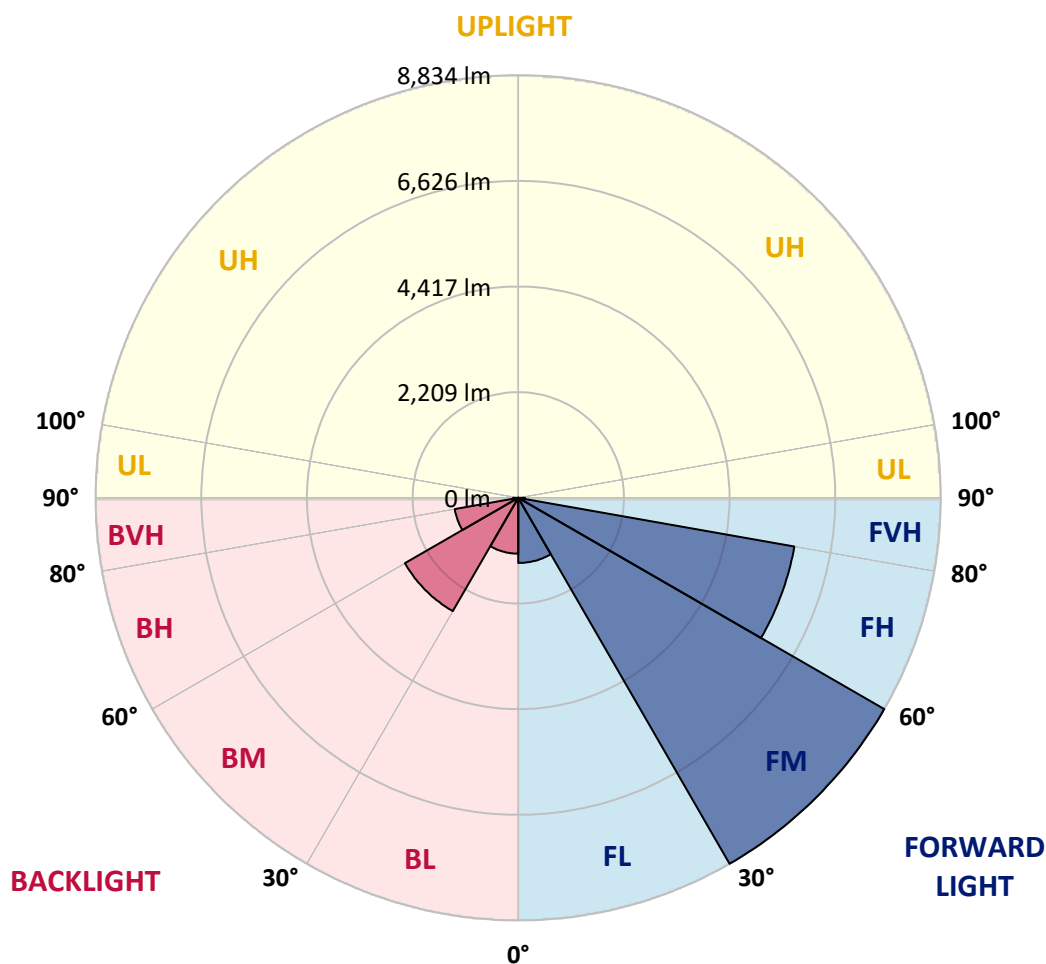
CATALOG NUMBER: NAV-SB5A-835-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1362.2	6.3			
FM	(30°-60°)	8834.2	41.0			
FH	(60°-80°)	5860.0	27.2			G3/7500
FVH	(80°-90°)	141.1	0.7			G2/225
BL	(0°-30°)	1167.7	5.4	B3/2500		
BM	(30°-60°)	2735.9	12.7	B3/5000		
BH	(60°-80°)	1348.9	6.3	B3/2500		G3/2500
BVH	(80°-90°)	107.8	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



REPORT NUMBER: P967924

CATALOG NUMBER: NAV-SB5A-835-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2391.0	2391.0	2391.0	2391.0	2391.0	2391.0	2391.0	2391.0	2391.0	2391.0	2391.0
2.5°	2366.1	2379.7	2376.4	2370.6	2369.5	2371.7	2375.2	2378.6	2377.5	2383.1	2392.1
5°	2359.3	2372.9	2371.7	2371.7	2376.4	2385.4	2391.0	2396.8	2391.0	2397.9	2410.3
7.5°	2363.9	2374.1	2378.6	2383.1	2394.4	2411.4	2425.0	2437.4	2430.7	2438.6	2454.5
10°	2421.7	2429.6	2434.1	2434.1	2442.1	2461.2	2474.9	2497.5	2491.9	2504.3	2524.7
12.5°	2526.9	2534.9	2534.9	2530.3	2536.1	2548.5	2553.0	2578.0	2567.7	2588.1	2608.5
15°	2656.1	2672.0	2659.5	2651.6	2653.8	2666.3	2665.1	2684.4	2674.2	2691.2	2709.3
17.5°	2798.8	2819.2	2798.8	2797.6	2793.1	2806.8	2807.9	2824.9	2806.8	2819.2	2831.7
20°	2967.6	2995.9	2978.9	2984.6	2974.3	2980.0	2985.7	3010.6	2982.3	2991.4	2988.0
22.5°	3205.4	3239.4	3221.3	3242.8	3236.0	3231.5	3230.4	3274.6	3230.4	3233.8	3200.9
25°	3552.0	3592.8	3561.1	3590.6	3590.6	3605.2	3622.2	3678.9	3605.2	3583.7	3498.7
27.5°	4064.0	4104.7	4042.5	4060.5	4054.9	4091.2	4073.0	4213.5	4134.2	4099.1	3928.1
30°	4680.2	4752.6	4634.8	4630.3	4624.7	4682.4	4708.4	4801.3	4720.9	4685.8	4479.7
32.5°	5346.2	5422.0	5281.6	5240.8	5219.3	5254.5	5232.9	5307.7	5252.1	5197.8	4943.0
35°	6050.7	6125.4	5991.7	5912.5	5826.4	5752.8	5675.7	5695.0	5642.9	5560.2	5296.3
37.5°	6716.7	6853.8	6712.1	6627.2	6468.6	6324.8	6109.6	6020.1	5971.3	5895.5	5629.3
40°	7395.2	7473.3	7365.6	7293.2	7121.0	6895.6	6551.3	6362.2	6296.5	6222.9	5997.5
42.5°	7894.7	7969.4	7911.7	7861.7	7727.0	7465.4	7020.2	6783.4	6688.3	6605.7	6414.2
45°	8291.0	8346.6	8310.3	8328.4	8270.7	8016.9	7506.2	7235.5	7136.9	7036.1	6885.4
47.5°	8450.8	8509.7	8567.5	8675.1	8773.6	8586.7	8028.3	7724.7	7620.6	7517.5	7369.1
50°	8432.7	8492.6	8660.3	8889.1	9195.0	9132.6	8578.7	8245.7	8149.5	8031.7	7894.7
52.5°	8287.6	8355.6	8570.8	8951.4	9438.4	9541.5	9139.4	8783.7	8693.1	8552.7	8415.7
55°	7907.1	7947.8	8270.7	8809.9	9496.2	9827.0	9688.8	9356.9	9266.3	9070.3	8920.8
57.5°	7201.4	7260.4	7730.4	8428.2	9351.3	10020.6	10171.3	9959.5	9872.3	9590.2	9433.9
60°	6280.6	6374.6	6912.6	7787.0	8982.0	10019.5	10609.7	10551.9	10479.4	10102.2	9939.1
62.5°	5238.6	5347.3	5864.9	6880.9	8336.4	9735.2	10883.8	11048.0	11010.6	10574.5	10366.1
65°	4023.2	4098.0	4613.3	5708.6	7331.7	9124.8	10915.4	11386.6	11393.4	10933.6	10589.3
67.5°	2678.7	2894.0	3341.4	4283.7	5986.1	8126.8	10636.8	11442.2	11507.8	11057.0	10477.1
70°	1307.1	1590.3	2028.6	2784.1	4283.7	6596.6	9908.5	10986.8	11132.9	10696.8	9808.8
72.5°	542.5	634.3	873.3	1373.9	2459.0	4451.4	8445.1	9752.2	10022.9	9478.1	8246.9
75°	365.8	396.5	499.5	704.5	1120.2	2195.1	6090.3	7271.7	7707.8	7158.4	5851.3
77.5°	282.1	301.2	363.6	492.7	666.0	830.2	3259.8	4382.3	4607.7	4265.6	3044.6
80°	222.0	236.8	271.8	359.1	472.3	444.0	1111.1	1985.5	2115.8	1774.9	978.6
82.5°	192.6	198.2	194.9	243.5	313.8	259.4	364.7	732.9	808.7	586.7	319.4
85°	139.3	155.2	162.0	150.7	166.5	131.4	149.5	259.4	285.5	254.8	180.1
87.5°	56.7	83.8	103.1	97.4	61.2	37.4	46.4	75.8	87.2	95.1	58.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P967924

CATALOG NUMBER: NAV-SB5A-835-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2391.0	2391.0	2391.0	2391.0	2391.0	2391.0	2391.0	2391.0	2391.0	2391.0	2391.0
2.5°	2393.3	2401.3	2406.9	2413.7	2418.2	2425.0	2438.6	2446.6	2447.7	2453.3	2452.2
5°	2414.8	2426.2	2438.6	2456.7	2477.1	2494.1	2520.2	2538.3	2545.1	2550.7	2549.6
7.5°	2461.2	2477.1	2499.8	2531.5	2561.0	2583.6	2615.3	2636.8	2658.3	2666.3	2667.5
10°	2530.3	2553.0	2585.9	2628.9	2660.6	2690.1	2722.9	2741.1	2762.6	2771.6	2776.1
12.5°	2616.4	2640.2	2683.2	2743.3	2772.7	2793.1	2804.5	2799.9	2804.5	2812.4	2814.6
15°	2715.0	2741.1	2789.7	2854.3	2874.7	2856.6	2831.7	2809.0	2805.6	2807.9	2815.8
17.5°	2831.7	2850.9	2907.5	2961.9	2947.2	2872.5	2818.0	2781.8	2763.7	2758.1	2766.0
20°	2994.7	2994.7	3041.2	3075.2	2976.6	2849.8	2764.8	2705.9	2668.6	2652.7	2649.3
22.5°	3193.0	3174.8	3204.3	3180.5	2971.0	2786.4	2668.6	2566.6	2510.0	2487.4	2483.9
25°	3444.4	3422.9	3415.0	3267.7	2930.2	2685.5	2494.1	2370.6	2320.8	2308.4	2310.7
27.5°	3823.9	3769.5	3666.4	3315.3	2855.4	2526.9	2290.3	2175.9	2147.5	2148.6	2152.1
30°	4329.0	4220.3	3967.7	3323.3	2733.1	2302.7	2081.9	2000.3	1986.7	1992.4	2011.6
32.5°	4796.8	4693.8	4275.8	3287.0	2545.1	2083.0	1894.9	1840.6	1820.2	1827.0	1836.1
35°	5163.7	5135.5	4561.2	3236.0	2314.0	1876.8	1727.3	1680.9	1641.2	1632.2	1639.0
37.5°	5510.4	5499.0	4775.3	3164.7	2085.3	1730.7	1592.5	1531.4	1473.5	1441.9	1443.0
40°	5891.0	5879.6	4915.7	3054.8	1882.5	1603.8	1471.3	1390.9	1319.6	1261.8	1267.4
42.5°	6319.1	6252.3	4982.5	2897.4	1710.3	1496.2	1372.8	1264.0	1170.0	1116.8	1120.2
45°	6786.9	6636.3	4981.4	2696.9	1565.4	1397.7	1267.4	1113.4	1026.2	976.3	974.1
47.5°	7283.0	7003.2	4920.3	2474.9	1424.9	1288.9	1104.3	986.6	928.8	898.2	891.4
50°	7794.9	7346.5	4816.1	2220.0	1281.0	1165.5	1002.4	922.0	877.8	849.5	839.3
52.5°	8276.4	7657.9	4690.3	1931.2	1134.9	1045.4	957.1	894.8	848.4	816.6	803.1
55°	8723.8	7926.3	4512.6	1635.6	1016.0	965.0	935.6	883.4	830.2	792.8	778.2
57.5°	9121.3	8100.8	4205.6	1358.0	931.0	909.5	913.0	864.2	803.1	771.3	750.9
60°	9452.0	8228.8	3751.4	1101.0	861.9	855.2	877.8	828.0	756.7	720.4	704.5
62.5°	9650.3	8226.5	3194.1	901.6	803.1	805.3	831.4	782.7	710.2	676.2	666.0
65°	9633.3	8024.9	2582.5	771.3	746.4	748.7	782.7	732.9	671.7	651.3	650.2
67.5°	9292.3	7533.3	1981.0	686.4	684.1	694.3	734.0	698.8	647.9	645.6	649.0
70°	8369.2	6512.7	1427.1	618.4	619.6	634.3	686.4	677.3	635.4	639.9	638.8
72.5°	6711.0	4965.6	958.3	547.0	548.2	571.9	641.0	660.3	623.0	683.0	692.1
75°	4469.5	3096.7	616.1	471.2	472.3	502.9	601.5	627.5	589.0	680.7	686.4
77.5°	2147.5	1392.1	446.3	396.5	396.5	424.8	519.9	561.8	501.7	529.0	484.8
80°	741.9	523.3	351.2	319.4	312.6	331.9	438.3	487.1	432.7	398.7	373.8
82.5°	292.2	271.8	282.1	248.0	225.4	237.9	340.9	402.1	318.3	287.7	286.6
85°	167.6	176.7	199.4	164.2	130.3	146.1	250.3	288.8	240.2	211.8	216.4
87.5°	45.3	62.3	91.7	85.0	58.9	62.3	118.9	159.7	138.2	106.5	109.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)